

Work Order ID 153064

Monday, November 07, 2016 4:09:04 PM

153064

Page 1

Item ID: D4017-9 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Rib
 Start Date: 11/4/2016 Start Qty: 8.00 ***8*** **DAS 21 9-89** Cust Item ID:
 Required Date: 11/7/2016 Req'd Qty: 8.00 ***8*** Customer:
 Reference:

Approvals: Process Plan: **DAS 21 9-89** Date: **NOV 09 2016** Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4017	E								

100 0.00
100
 Large Fab Memo 0.00
 Large Fab 1- Cut tube as per dwg D4017
 2- Deburr and remove identify marks
 12 QL 17/01/10
 12 CC 17-1-10

110 QC6- Inspect dimensions to drawing 0.00
110
 QC Memo 0.00
 Quality Control
 12x **DAS 43 9-89** JAN 11 201

120 Identify as per dwg & Stock Location: **WVA 09** 0.00
120
 Packaging Memo 0.01
 Packaging LOCATION: WA004
 12x **DAS 43 9-89** JAN 11 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Monday, November 07, 2016 4:09:04 PM

153064

Page 2

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Rib

Start Date: 11/4/2016 **Start Qty:** 8.00 ***g***

Cust Item ID:

Required Date: 11/7/2016 **Req'd Qty:** 8.00 ***Q***

Customer:

Reference:

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code
---------	--------	--------------

**Accept
Qty**

Reject
QtyReject
Number

Insp.

130

QC21- Final Inspection - Work Order Release

0.00

130

DAS
21
9-89

JAN 12 2017

OC

Memo

0.13

Quality Control

VS 17/1/1

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Monday, November 07, 2016 4:09:04 PM

Page 1

Work Order ID: 153064

153064

Parent Item: D4017-9

D4017-9

Parent Item Name: Rib

Start Date: 11/4/2016

Required Date: 11/7/2016

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP RevA: new issue DD 09.11.26 verified by:EC IPP Rev:B as
per dwg RevA DD 10.03.06 verified by:EC IPP Rev:C as per dwg RevB
DD 10.04.16 verified by:EC IPP Rev:D as per dwg revC DD 10.08.18
verified by:EC IPP Rev:E 11.01.17 chg qc5 to 6 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TS0.500W.049		Purchased	No			100	f	1,357.840	2.28166	19.21398			

M304TS0 500W 049

Square Tubing

Q.L 17/01/10

Location

Loc Qty

Loc Code

WA004

1357.84

M136011

29

M134486

4

M134618

69.84

M135215

624

M136011

660

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

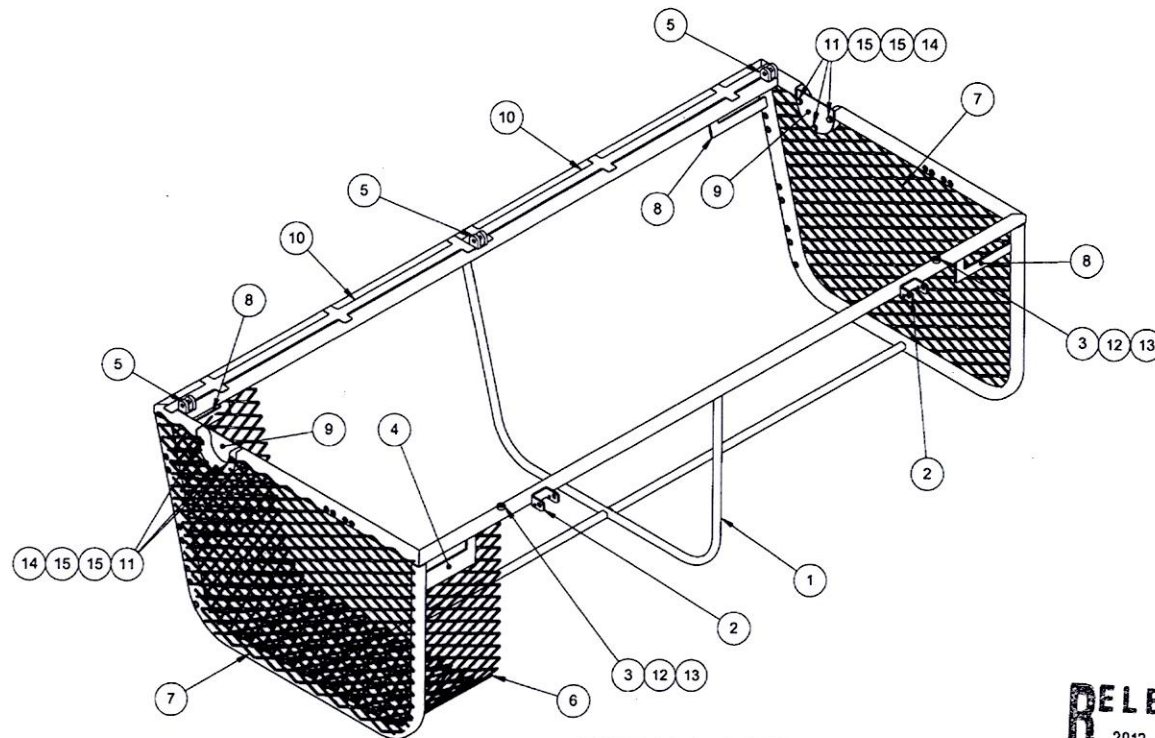


QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

ITEM	QTY	P/N	DESCRIPTION
	X	D4017-041	SHORT BASKET ASSY (350)
1	1	D4017-101	TUBULAR ASSY (350 SHORT BASKET)
2	2	D2581	MOUNTING BRACKET
3	2	D2931	BUMPER
4	1	D3913-15	WIDE HANDLE PLATE
5	3	D4016-1	HINGE HALF, BASE
6	1	D4020-3	MESH (350 BASKET SHORT BASE)
7	2	D4020-11	END MESH, BASKET
8	3	D4021-1	HANDLE PLATE
9	2	D4021-5	BLANKING PLATE
10	2	D4672-3	BLANKING PLATE
11	6	AN3-10A	BOLT, MACHINE
12	2	AN960JD8	WASHER
13	2	MS20600AD4W3	RIVET, BLIND, PAN-HEAD
14	6	MS21042L3	NUT, SELF-LOCKING
15	12	NAS1149F0332P	WASHER



D4017-041 SHORT BASKET BASE ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 153064 MJS
1671-09

RELEASED
2013-08-16

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 28.8 lbs APPROX
- 8) INSTALL AFTER FINISH
- 9) MASK HOLES PRIOR TO POWDER COAT
- 10) WELD PER DART QSI 004

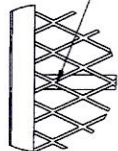
E	PICTORIAL UPDATE TO MULTIPLE VIEWS FOR CHANGES TO D4034-043. A4-4 28.13 DIM IS NOW REF.	AJS	13.07.18
D	ADD D4672-3 (ZN CS-1, D4-1, D6-1, D3-2, AND D4-2). REASON: PAR12-197.	MB	12.06.18
C	ITEM #4 NOW INSTALLED OUTBOARD (C4-1, C5-1, B5-2 AND D6-2). REASON: ELIMINATE INTERFERENCE PREVENTING INSTALLATION OF RECEIVER ASSEMBLIES.	MB	10.07.23
B	QTY 1 D4021-1 REPLACED WITH QTY 1 D3913-15; AN3-10A BOLT WAS AN3C10A; NAS1149F0332P WASHER WAS NAS1149C0332R; SECTION F-F UPDATED (D6-2); ITEMS RENUMBERED; DETAIL D UPDATED (A4-3)	JPH	10.03.25
A	NEW ISSUE	AJS	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.07.18		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4017** REV. E
SHEET 1 OF 5
TITLE **SHORT BASKET BASE ASSY (350)** NTS
SCALE

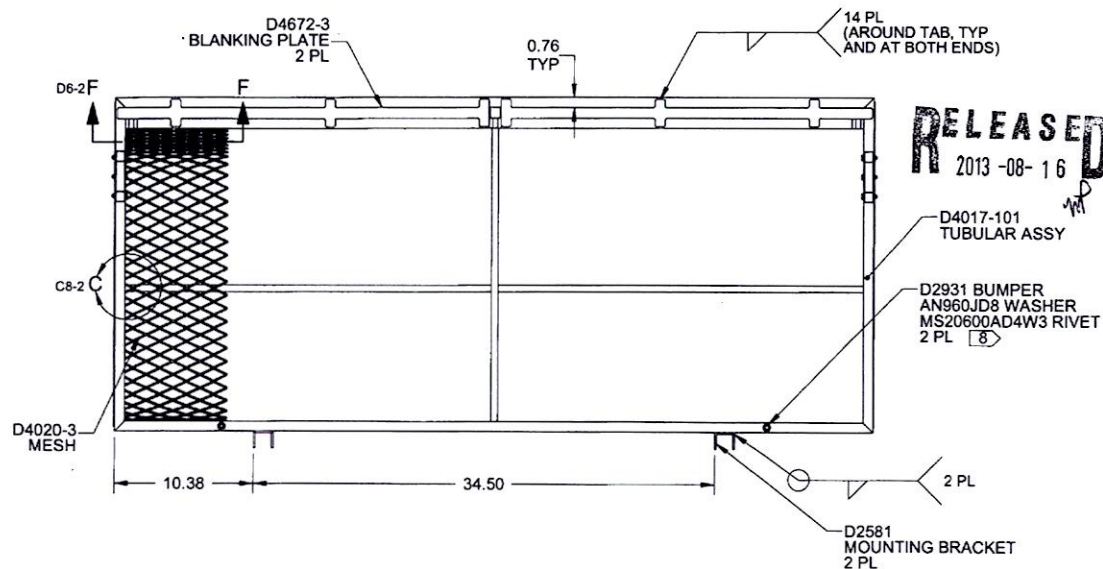
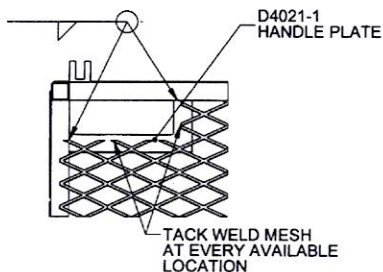
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TACK WELD MESH
AT EVERY AVAILABLE
LOCATION

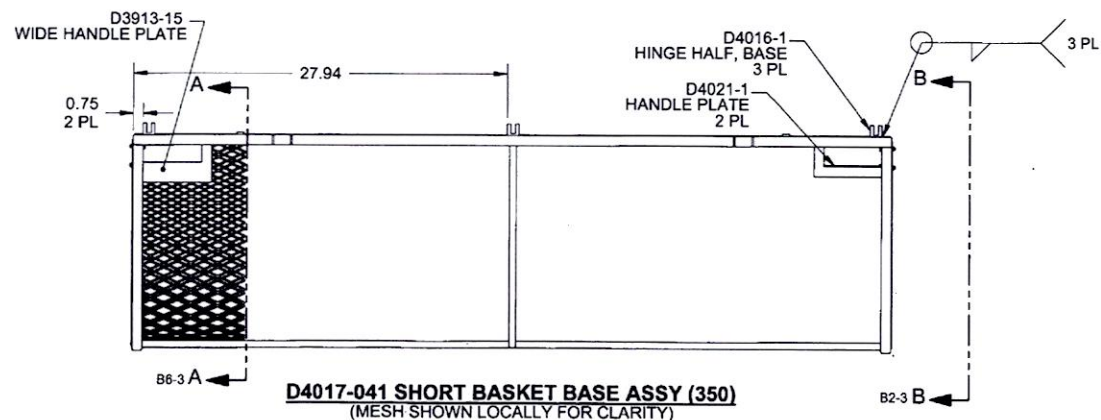
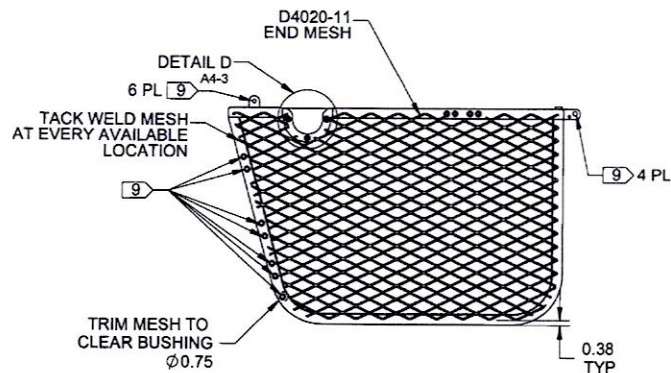


DETAIL C D5-2

SECTION F-F
TYPICAL FOR ALL
HANDLE PLATES



RELEASED
2013-08-16



D4017-041 SHORT BASKET BASE ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4017	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET BASE ASSY (350)	NTS
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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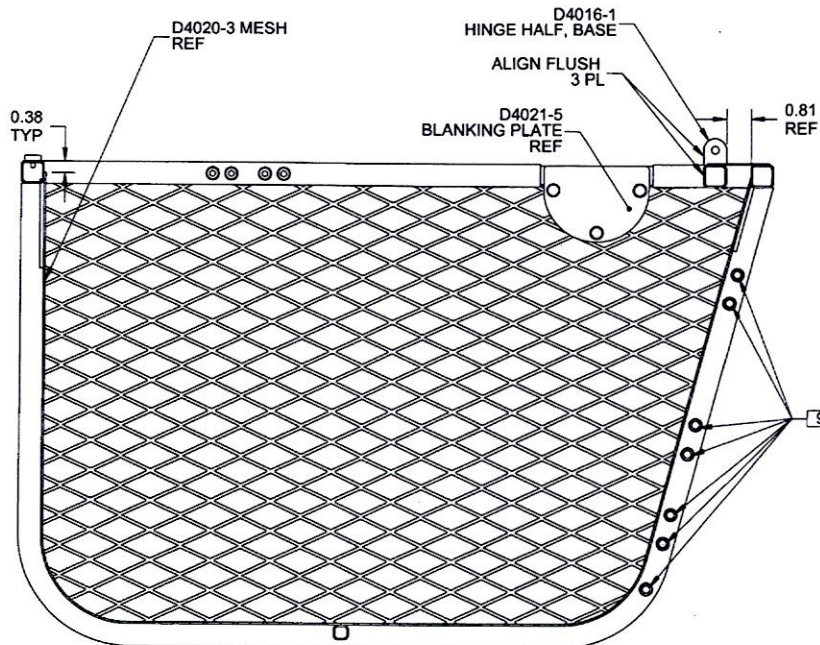
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D

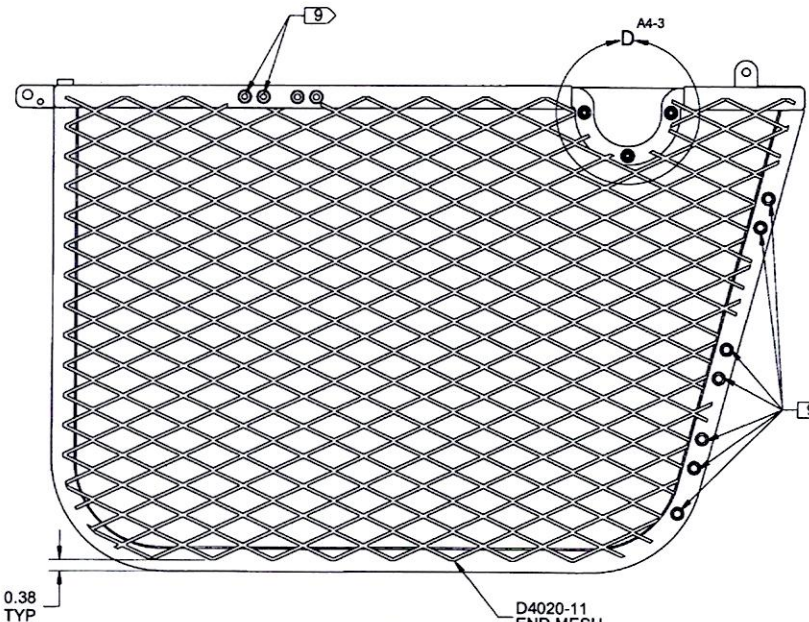
C

B

A



SECTION A-A A5-2



VIEW B-B A2-2

8
D4021-5
BLANKING PLATE

8
AN3-10A BOLT, MACHINE
NAS1149F0332P WASHER, 2X
MS21042L3 NUT
3 PL

TRIM MESH LOCALLY
Ø0.50 - Ø0.60
TO CLEAR FASTENERS

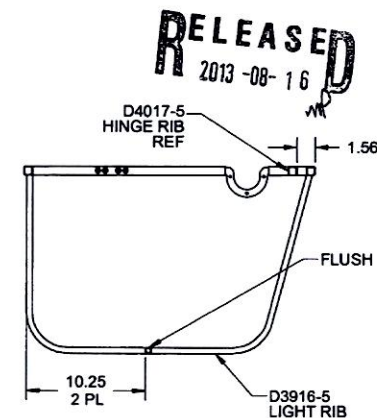
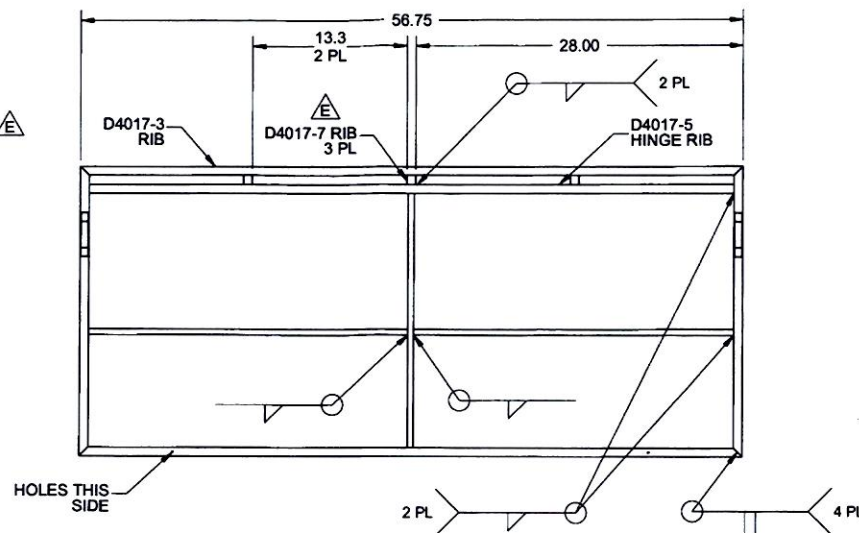
DETAIL D D1-3
B7-2

RELEASED
2013-08-16
MP

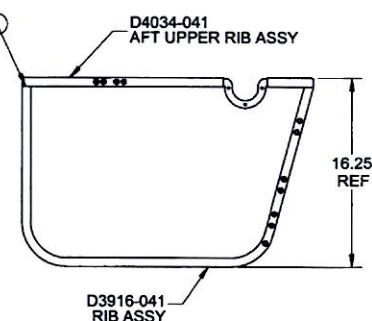
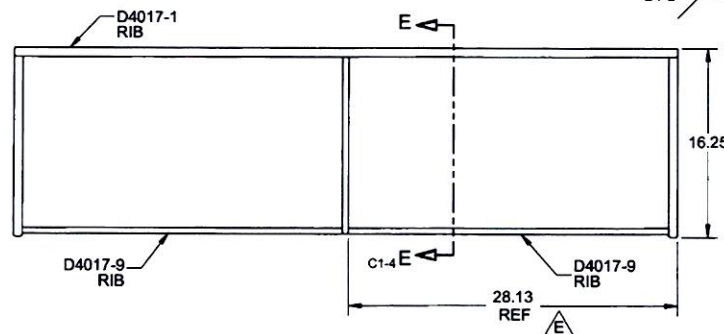
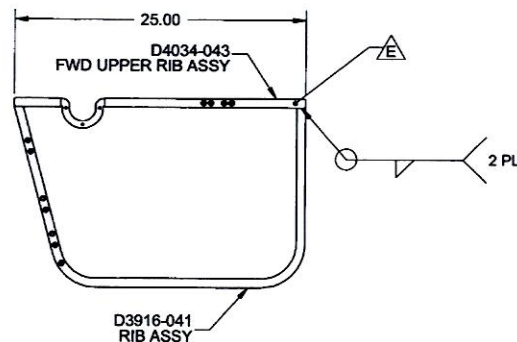
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DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4017	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET BASE ASSY (350)	NTS
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8 7 6 5 4 3 2 1

ITEM	QTY -101	P/N	DESCRIPTION
	X	D4017-101	TUBULAR ASSY (350 SHORT BASKET)
1	1	D4017-1	RIB
2	1	D4017-3	RIB
3	1	D4017-5	HINGE RIB
4	3	D4017-7	RIB
5	2	D4017-9	RIB
6	1	D3916-5	LIGHT RIB
7	2	D3916-041	RIB ASSY
8	1	D4034-041	AFT UPPER RIB ASSY
9	1	D4034-043	FWD UPPER RIB ASSY



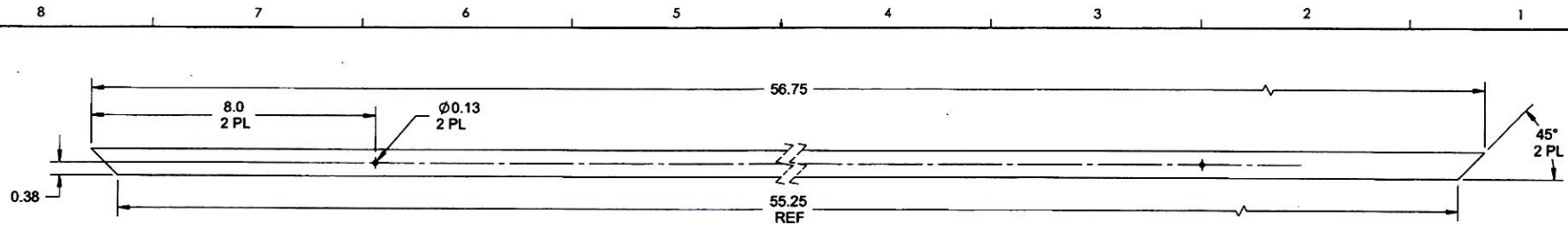
SECTION E-E A4-4



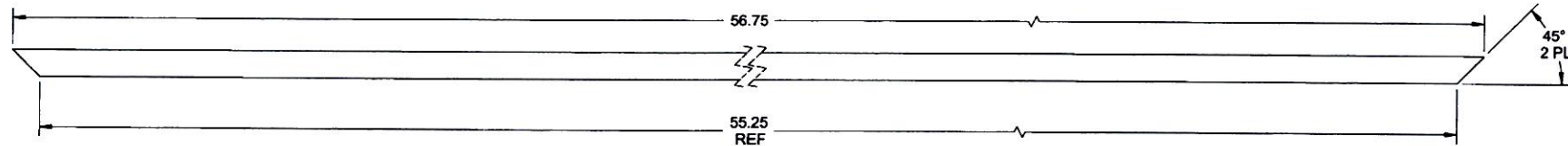
8 D4017-101 TUBULAR ASSY (350 SHORT BASKET)

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 15.38 lbs
 - 8) TOLERANCE FOR XX.XX DIMENSIONS ± 0.06 FOR D4017-101
 - 9) WELD PER DART QSI 004

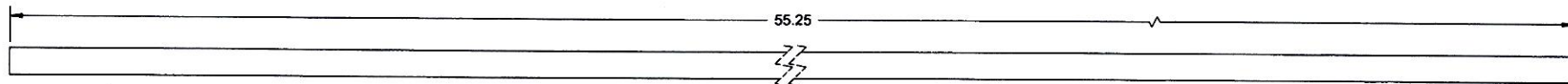
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>[Signature]</i>	D4017	SHEET 4 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SHORT BASKET BASE ASSY (350)	NTS
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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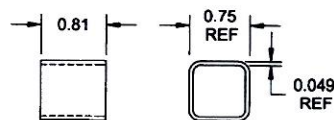
D4017-1 RIB



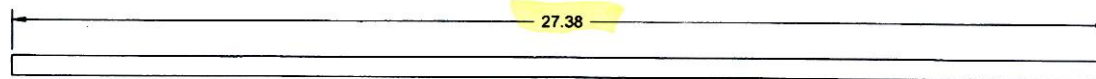
D4017-3 RIB



D4017-5 HINGE RIB



D4017-7 RIB



D4017-9 RIB

NOTES:

1) MATERIAL -1 THRU -7: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.750W.049

-9: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.500W.049

- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: SEE ASSEMBLED WEIGHTS

RELEASED
2013-08-16

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4017	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET BASE ASSY (350)	NTS
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